PROCEEDINGS

OF

THE ROYAL SOCIETY.

1837—1838. No. 31.

December 7, 1837.

FRANCIS BAILY, Esq., Vice-President and Treasurer, in the Chair.

No paper was read.

December 14, 1837.

JOHN GEORGE CHILDREN, Esq., Vice-President, in the Chair.

The reading of a paper, entitled "On low Fogs and stationary Clouds." By William Kelly, M.D. Communicated by Captain Beaufort, R.N., F.R.S., &c., was resumed and concluded.

The object of the present paper is to point out the circumstances which influence the formation of low fogs, and to show what analogy exists between the causes that produce them and those that occasion certain forms of clouds, which may be considered as differing from fogs only in position. Having been attached for several years to the naval party employed in the survey of the gulf and river of St. Lawrence, the author had ample opportunities of observing the phenomena in question. He concludes that the fogs described occur chiefly when the air is nearly saturated with moisture, and when at the same time the temperature of the water on which they rest either exceeds that of the air, or is considerably below it. These fogs are generally very dense, often limiting the sphere of vision to a few fathoms; but seldom extend to any considerable height. They do not often cover the land to any distance from the shore; and the tops of the hills, close to the water's edge, are clear, while the bases, or sides, are enveloped in the mist.

The following papers were then read:—

"On the Colours of Mixed Plates." By Sir David Brewster, K.G.H., F.R.S., &c.

In the prosecution of his optical inquiries, the author was induced to study the phenomena of mixed plates, (originally discovered by Dr. Young, and described by him in the Philosophical Transactions for 1802,) as he had observed similar appearances in various mineral bodies under analogous circumstances, to which he had been led to